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Attorney's Docket No.: 20674-003US1 / U2004-0001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Van Ginkel, et al.	Art Unit	: Unknown
Serial No.	: 10/578,939	Examiner	: Unknown
Filed	: May 9, 2006		
Title	: COMPOSITIONS FOR REDUCING BACTERIAL CARRIAGE AND CNS INVASION AND METHODS OF USING SAME		

MAIL STOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicants request consideration of the references listed on the attached PTO-1449 form. Under 37 C.F.R. § 1.98 (a)(2)(ii), only copies of foreign patent documents and/or non-patent literature are enclosed. Copies of any listed U.S. patents or U.S. patent application publications can be provided upon request.

This statement is being filed within three months of the filing date of the application or before the receipt of a first Office Action on the merits. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: December 21, 2006

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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No.	Application No.
		20674-003US1	10/578,939
Information Disclosure Statement by Applicant (Use several sheets if necessary)		Applicant: Van Ginkel, et al.	
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(37 CFR 1.98(b))

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	6,027,734	02/22/2000	Briles, et al.			
	AB	6,500,613	12/31/2002	Briles, et al.			
	AC	6,514,503	02/04/2003	Gizurarson, et al.			
	AD	6,573,082	06/03/2003	Choi, et al.			
	AE	6,635,246	10/21/2003	Barrett, et al.			
	AF	6,699,703	03/02/2004	Doucette-Stamm, et al.			

Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation Yes	Translation No
	AG	WO 02/77021	10/03/2002	PCT				
	AH	WO 02/83855	10/24/2002	PCT				
	AI	WO 04/92209	10/28/2004	PCT				
	AJ	WO 00/06737	02/10/2000	PCT				

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AK	Amsbaugh, et al., "Genetic Control of the Antibody Response to Type III Pneumococcal Polysaccharide in Mice" *J. Exp. Med.* 136:931-949 (1972)
	AL	Avery, et al., "Studies on the Chemical Nature of the Substance Inducing Transformation of Pneumococcal Types" *J. Exp. Med.* 149:297-326 (1979)
	AM	Balachandran, et al., "Role of Pneumococcal Surface Protein C in Nashopharyngeal Carriage and Pneumonia and Its Ability to Elicit Protection against Carriage of *Streptococcus* pneumoniae" *Infection and Immunity* 70:2526-2534 (2002)
	AN	Berry, et al., "Cloning and expression of the pneumococcal neuraminidase gene in Escherichia coli" *Gene* 71:299-305 (1988)
	AO	Berry, et al., "Cloning and Characterization of nanB, a Second *Streptococcus pneumoniae* Neuraminidase Gene, and Purification of the NanB Enzyme from Recombinant *Escherichia coli*" *Journal of Bacteriology* 178(16):4854-4860 (1996)

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	AP	Berry, et al., "Additive Attenuation of Virulence of *Streptococcus pneumoniae* by Mutation of the Genes Encoding Pneumolysin and Other Putative Pneumococcal Virulence Proteins" *Infection and Immunity* 68:133-140 (2000)
	AQ	Black, et al., "Efficacy, safety and immunogenicity of heptavalent pneumococcal conjugate vaccine in children. Northern California Kaiser Permanente Vaccine Study Center Group" *Pediatr. Infect. Dis. J.* 19:187-195 (2000)
	AR	Briles, et al., "Mouse Igg3 antibodies are highly protective against infection with Streptococcus pneumoniae" *Nature* 294(5836):88-90 (1981)
	AS	Briles, et al., "Antiphosphocholone Antibodies Found in Normal Mouse Serum are Protective Against Intravenous Infection with Type *3 Streptococcus Pneumoniae*" *J. Exp. Med.* 153:694-705 (1981)
	AT	Briles, et al., "The effects of idiotype on the ability of IgG1 anti-phosphorylcholine antibodies to protect mice from fatal infection with Streptococcus pneumoniae" *Eur. J. Immunol.* 14:1027-1030 (1984)
	AU	Briles, et al., "The effects of subclass on the ability of anti-phosphocholine antibodies to protect mice from fatal infection with Streptococcus pneumoniae" *J. Mol. Cell. Immunol.* 1:305-309 (1984)
	AV	Briles, et al., "Genetic control of the susceptibility to pneumococcal infection." *Curr. Top. Microbiol. Immunol.* 124:103-120 (1986)
	AW	Briles, et al., "Antipneumococcal Effects of C-Reactive Protein and Monoclonal Antibodies to Penumococcal Cell Wall and Capsular Antigens" *Infection and Immunity* 57(5):1457-1464 (1989)
	AX	Briles, et al., "Strong Association between Capsular Type and Virulence for mice among Human Isolates of *Streptococcus pneumoniae*" *Infection and Immunity* 60:111-116 (1992)
	AY	Briles, et al., "Immunizations with Pneumococcal Surface Protein A and Pneumolysin are Protective against Pneumonia in a Murine Model of Pulmonary Infection with *Streptococcus pneumoniae*" *J. Infect. Dis.* 188:339-348 (2003)
	AZ	Briles, et al., "Nasal Colonization with *Streptococcus pneumoniae* Includes Subpopulations of Surface and Invasive Pneumococci" *Infection and Immunity* 73(10):6945-6951 (2005)
	AAA	Brooks-Walter, et al., "The pspC gene of Streptococcus pneumoniae encodes a polymorphic protein, PspC, which elicits cross-reactive antibodies to PspA and provides immunity to pneumococcal bacteremia" *Infection and Immunity* 67:6533-6542 (1999)
	ABB	Camara, et al., "A neuraminidase from Streptococcus pneumoniae has the features of a surface protein" *Infection and Immunity* 62(9):3688-3695 (1994)
	ACC	Crennell, et al., "Crystal structure of a bacterial sialidase (from Salmonella typhimurium LT2) shows the same fold as an influenza virus neuraminidase" *PNAS* 90(21):9852-9856 (1993)
	ADD	Hoskins, et al., "Genome of the bacterium Streptococcus pneumoniae strain R6" *Journal of Bacteriology* 183(19):5709-5717 (2001)
	AEE	Jedrzejas, "Pneumococcal virulence factors: structure and function" *Microbiol. Mol. Biol. Rev.* 65(2):187-207 (2001)
	AFF	Kelly, et al., "Neuraminidase activities of clinical isolates of Diplococcus pneumoniae" *J. Bacteriol.* 94:272-273 (1967)
	AGG	King, et al., "Phase variable desialylation of host proteins that bind to Streptococcus pneumoniae in vivo and protect the airway" *Mol. Microbiol.* 54:159-171 (2004)

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	AHH	LaMarco, et al., "Experimental alteration of chinchilla middle ear mucosae by bacterial neuraminidase" *Ann. Otol. Rhinol. Laryngol.* 95:304-308 (1986)
	AII	Lock, et al., "Purification and immunological characterization of neuraminidase produced by Streptococcus pneumoniae" *Microb. Pathog.* 4:33-43 (1988)
	AJJ	Lock, et al., "Comparative efficacy of pneumococcal neuraminidase and pneumolysin as immunogens protective against Streptococcus pneumoniae" *Microb. Pathog.* 5(6):461-467 (1988)
	AKK	Long, et al., "Immunization with native or recombinant Streptococcus pneumoniae neuraminidase affords protection in the chinchilla otitis media model" *Infection and Immunity* 72:4309-4313 (2004)
	ALL	Madhi and Klugman, "A role for Streptococcus pneumoniae in virus-associated pneumonia" *Nat. Med.* 10:811-813 (2004)
	AMM	Magee and Yother, "Requirement for capsule in colonization by Streptococcus pneumoniae" *Infection and Immunity* 69:3755-3761 (2001)
	ANN	Martinot, et al., "Haemolytic-Uraemic syndrome associated with Streptococcus pneumoniae meningitis" *European Journal of Pediatrics* 148(7):648-649 (1989)
	AOO	Manco, et al., "Pneumococcal neuraminidases A&B both have essential roles during infection of the respiratory trackt & sepsis" *Infection and Immunity* 74(7):4014-4020 (2006)
	APP	McCullers and Bartmess, "Role of neuraminidase in lethal synergism between influenza virus and Streptococcus pneumoniae" *J. Infect. Dis.* 187:1000-1009 (2003)
	AQQ	McDaniel, et al., "A protective monoclonal antibody that reacts with a novel antigen of pneumococcal teichoic acid" *Microb. Pathog.* 3:249-260 (1987)
	ARR	O'Toole, et al., "Neuraminidase activity in bacterial meningitis" *J. Clin. Invest.* 50:979-985 (1971)
	ASS	Paton, et al., "Molecular analysis of the pathogenicity of Streptococcus pneumoniae: the role of pneumococcal proteins" *Annu. Rev. Microbiol.* 47:89-115 (1993)
	ATT	Paton, et al., "Molecular analysis of putative pneumococcal virulence proteins" *Microb. Drug Resist.* 3(1):1-10 (1997)
	AUU	Scanlon, et al., "Purification and properties of Streptococcus pneumoniae neuraminidase" *Enzyme* 41(3):143-150 (1989).
	AVV	Shakhnovich, et al., "Neuraminidase expressed by Streptococcus pneumoniae desialylates the lipopolysaccharide of Neisseria meningitidis and Haemophilus influenzae: a paradigm for interbacterial competition among pathogens of the human respiratory tract" *Infection and Immunity* 70:7161-7164 (2002).
	AWW	Tettelin, et al., "Nasal lymphoid tissue (NALT) as a mucosal immune inductive site" *Science* 293:498-506 (2001).
	AXX	Tong, et al., "Comparison of structural changes of cell surface carbohydrates in the eustachian tube epithelium of chinchillas infected with a Streptococcus pneumoniae neuraminidase-deficient mutant or its isogenic parent strain" *Microb. Pathog.* 31:309-317 (2001).
	AYY	Tong, et al., "Evaluation of the virulence of a Streptococcus pneumoniae neuraminidase-deficient mutant in nasopharyngeal colonization and development of otitis media in the chinchilla model" *Infection and Immunity* 68:921-924 (2000).
	AZZ	Van Ginkel, et al., "Cutting edge: the mucosal adjuvant cholera toxin redirects vaccine proteins into olfactory tissues" *J. Immunol.* 165:4778-4782 (2000).
	AAAA	Van Ginkel, et al., "Pneumococcal carriage results in ganglioside-mediated olfactory tissue infection" *PNAS* 100(24):14363-14367 (2003).

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	ABBB	Wu, et al., "Nasal lymphoid tissue (NALT) as a mucosal immune inductive site" *Scand. J. Immunol.* 46:506-513 (1997).
	ACCC	Wu, et al., "Establishment of a Streptococcus pneumoniae nasopharyngeal colonization model in adult mice" *Microb. Pathog.* 23:127-137 (1997)
	ADDD	Yother, et al., "Protection of mice from infection with Streptococcus pneumoniae by anti-phosphocholine antibody" *Infection and Immunity* 36:184-188 (1982).
	AEEE	Yother, et al., "Truncated forms of PspA that are secreted from Streptococcus pneumoniae and their use in functional studies and cloning of the pspA gene" *J. Bact.* 174:610-618 (1992).
	AFFF	Yother, et al., "Transformation of encapsulated Streptococcus pneumoniae" *J. Bact.* 168:1463-1465 (1986).

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/Albert M Navarro/	05/27/2009

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